# Weichi Zhao

**└** +1(520) 389-9611 | ☑ wzhao42@asu.edu | **೧** WZStephen | **in** wzhao42

## **Profile**

Weichi graduated from Arizona State University with a Master of Computer Science degree in December 2020, where he also received a BS degree in May 2019. He is a grounded and solution-oriented engineer with a wide variety of experiences. His current interests are focusing on Software Engineering, Data Structure Design, Machine Learning, and Data Visualization. He is also equipped with well Developed analytical capability and leadership skills across the success of every academic course and event.

## Education

#### Ira A. Fulton Schools of Engineering - GPA: 3.97/4.00

MASTER OF COMPUTER SCIENCE, COMPUTER SCIENCE

Focusing on Computer Network, Machine Learning, Data Mining, and Data Visualization

Ira A. Fulton Schools of Engineering - GPA: 3.40/4.00

BACHELOR OF SCIENCE, COMPUTER SCIENCE

Focusing on Software Engineering, Network Programming, Computer Security

Arizona State University, Tempe, USA

May 2019 - December 2020

Arizona State University, Tempe, USA

August 2015 - May 2019

# Technical Skills \_

- Experienced in Object-Oriented Programming; Develop, Test and Debug; Interfaces design; Computer Network
- · Expert in Data Mining, Statistical Analysis, Distributed Database System Operation and Applications of Machine Learning
- Good at Virtual Reality Developing and Testing, Three-dimensional Models Design and Application
- · Equipped with the abilities to grasp new concepts quickly and efficiently; Master in working with both team and self-directed setting
- Excellent Project management and Organizations Skills

**Languages** Java, JavaScript, Python, ASP, MATLAB, C, C++, C#

Frameworks AWS, Flask, D3 **Communication** English, Mandarin

# Experience \_

#### SNAC, Arizona State University - Sponsor: Dijiang Huang

Tempe, AZ

January 2020 - May 2020

VIRTUAL PLATFORM DEVELOPER

· Assisted to develop an open virtual lab platform(THOTH Lab) for academic research and education purpose

- Extend the educational modules including Software-defined Networking and OpenFlow Switch Controllers
- Expand server module utilizes the Boto3 to enable the functionalities of remote controlling in AWS instances
- Participate in Web Front-end & Back-end development

#### SNAC, Arizona State University - Sponsor: Dijiang Huang

Tempe, AZ

RESEARCH PROJECT ASSISTANT

GRADUATE SERVICE ASSISTANT

May 2020 - August 2020

· Assisted to develop network security systems using the proposed techniques from the research paper(IR-CP-ABE) -Implemented the IR-CP-ABE system on the Android platform using Java

#### **CIDSE, Arizona State University**

Tempe, AZ

August 2019 - December 2020

- Helped to organize the high-level computer science classes
- Fall 2019: Assisted teaching Object-Oriented Program & Data CSE205, Computer Network CSE434
- Fall 2020: Assisted teaching Software QA and Testing CSE464, Database Management CSE412

# Projects \_

#### **Geospatial Data Analysis in Map-Reduce**

- Spatial analysis based on a collection of New York City taxi trip records, the purpose of this project is to identify unusual patterns in a statistically significant manner by a distributed in-memory computing frameworks by Apache Spark
- Training of Distributed Database System and Data Analysis

#### **Analysis on Continuous Glucose Monitoring Data**

- · Analysis of the time series data collected by CGM in order to extract meaningful statistics and other characteristics of the data
- Training of the Classification and Clustering in Machine Learning techniques

#### Benchmark of Spark for Large Mini-Batch Deep Learning Models

- Inquiry the traditional optimizer SGD in Spark and benchmark the performance on relatively big data set and DNN model
- Integrate the LARS-SGD optimizer into Spark, perform the benchmark on same data set and DNN model. The 97.79% of testing accuracy was achieved in batch size of 16384
- Training of Deep Learning and Data Mining

# Data Visualization for solving the VAST Challenge 2015

- · Analysis of time series data of user movement collected by Dino Fun World park from an event to extract the useful features
- Design the analytic visualization to showcase the incentive causes the mayhem and demonstrate the valuable findings
- Training of Data Visualization and Data Analysis